



Status Update on House Bill 45 (Radon Study) by the Utah Geological Survey and the DEQ Radon Program

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UTAH GEOLOGICAL SURVEY

geology.utah.gov

HB 45

- **LONG TITLE**

8 **General Description:**

9 This bill requires the Department of Natural Resources to study and make
10 recommendations regarding radon gas.

11 **Highlighted Provisions:**

12 This bill:

- 13 ▶ defines terms; and
- 14 ▶ requires the Department of Natural Resources to study and make recommendations
15 to the Natural Resources, Agriculture, and Environment Interim Committee on:
 - 16 • ways to increase public awareness about the risks of radon gas; and
 - 17 • ways to mitigate Utah residents' exposure to radon.

18 **Money Appropriated in this Bill:**

19 None

20 **Other Special Clauses:**

21 None

22 **Utah Code Sections Affected:**

23 ENACTS:

24 [79-2-405](#), Utah Code Annotated 1953



Radon Hazard Summary

- Radon: a colorless, tasteless and odorless radioactive gas from uranium decay in soil and rock that concentrates in enclosed spaces (basements are a good example)



Radon Hazard Summary

- Radon is the 2nd leading cause of lung cancer after smoking.
- Between 1973 and 2017, an estimated 5826 radon-related fatalities occurred in Utah*.
 - Utah's most deadly and costly geologic hazard.
 - Total, first-year health care costs of \$2.7 to \$3.6 million.

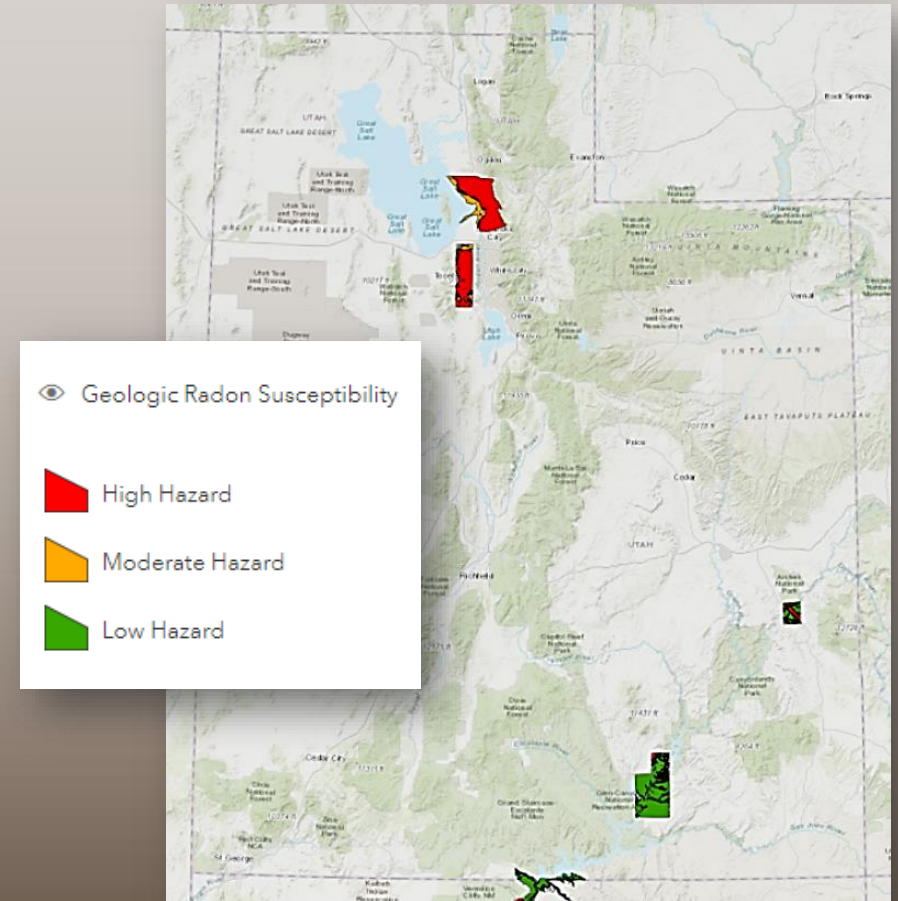


*Utah Department of Health

UGS Geologic Radon Hazard Mapping

The UGS maps geologic radon hazard using available geologic, DEQ radon testing, and other data.

Completed Maps: Davis County, parts of the Glen Canyon National Recreation Area, and the Copperton, Magna, Moab, and Tickville Spring quadrangles along the Wasatch Front.

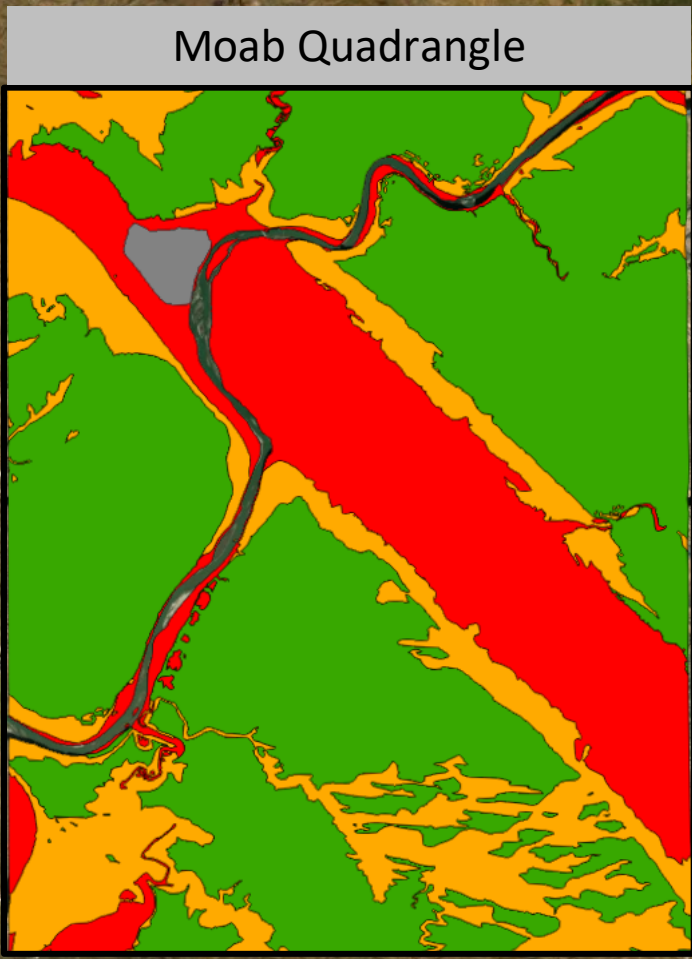
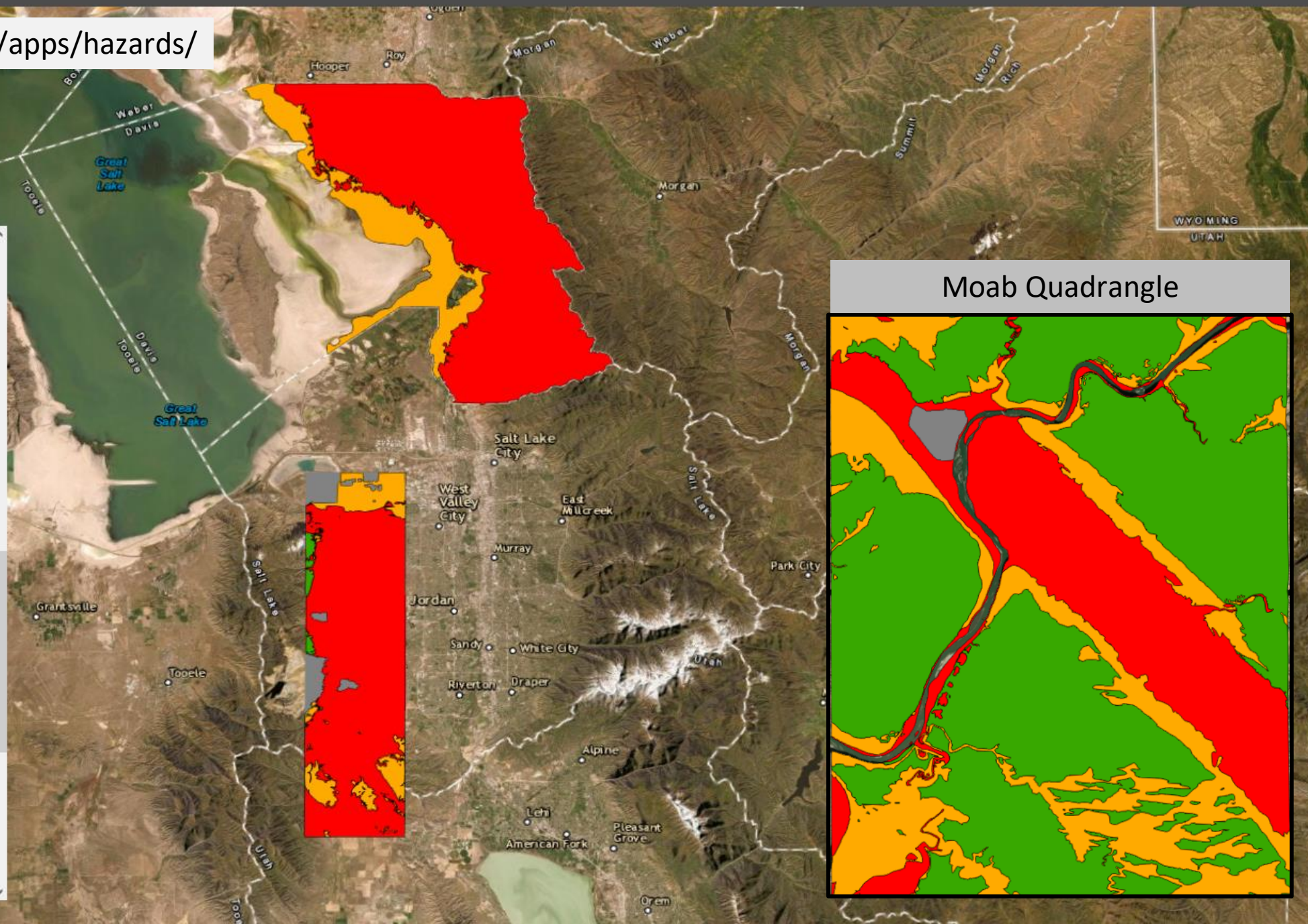


<https://geology.utah.gov/apps/hazards/>



- ☒ Piping and Erosion Susceptibility ...
- ☒ Geologic Radon Susceptibility ...
- ☐ Salt Tectonics-Related Ground Deformation ...
- ☐ Shallow Bedrock Potential ...
- ☐ Soluble Soil and Rock Susceptibility ...
- ☐ Wind-Blown Sand Susceptibility ...

- High Hazard
- Moderate Hazard
- Low Hazard



UGS Geologic Radon Hazard Mapping

The UGS works with DEQ to:

- Obtain indoor radon testing data,
- Provide educational outreach about radon hazards, and
- Provide and share geoscientific data and expertise.



DEQ's Radon Program in Operation for 30 Years

Highlights of Life-saving Radon Program

- Lung cancer has definitely been linked to radon exposure.
- The DEQ Radon Program is estimated to save over 200 lives in Utah every year. *
- DEQ collects radon data from home testing with over 65,000 completed tests.
- DEQ works with many partners that reduce the levels of radon in your home (builders, medical, real estate, non-profits, coalitions, schools, tribes, etc.).
- Radon testing is easy and inexpensive (\$10.95) for Utah residents.
- Radon reduction in homes is relatively inexpensive (\$1,500).
- January is National Radon Action Month - Proclamation signed and outreach planned.



*Utah Cancer Control & HCI estimate that 20% of lung cancer deaths are caused by Radon Gas.

Eleanor Diwer – Radon Coordinator



Radon: Moving Forward - More to Be Done

- Increase public awareness with legislative funding every year.
- Tax credit for building radon out of a home.
- Radon Mitigation Assistance Program
- Provide information to new homeowners.
- Test schools and daycares every 5 years for radon.
- Increase students awareness of: Radiation, Radioactivity, and Radon.
- Provide curriculum and toolkits for teachers.
- Increase coordination between DEQ and UGS.
- Reduce Utahns exposure to radon in new building construction.



Eleanor Diwer – Radon Coordinator

Preliminary Report Recommendations

- Improve Awareness of Radon Hazards
 - Provide radon test data to the public by U.S. Census block, rather than by zip code as currently provided.
 - By statute, require all radon test results from laboratories and radon mitigation contractors be forwarded to the Radon Program.
 - Develop a new geospatial radon test database and web map application utilizing available DEQ and other data.



Preliminary Report Recommendations

- Improve Awareness of Radon Hazards
 - Develop a school teaching kit for radon and radiological hazards, like those the UGS developed for other geologic topics.
 - Form a Radon Gas Hazard Working Group for DNR-UGS/DEQ collaboration and coordination on radon issues.



Preliminary Report Recommendations

- Ways to Mitigate Utah Residents' Exposure to Radon
 - Adopt Appendix F (Radon Control Methods) of the International Residential Code statewide.
 - Require Radon-Resistant New Construction (RRNC) for all new government buildings.
 - Fund a study to evaluate natural, background radon levels in various geologic units found in Utah to improve radon hazard mapping and mitigation.



Preliminary Report Recommendations

- Ways to Mitigate Utah Residents Exposure to Radon
 - Fund a radon testing program for existing school, daycare, jail/prison, and other government buildings.
 - Develop a no or low interest loan program for radon mitigation of existing homes (very helpful for low- and fixed-income homeowners).
 - Fund a study to evaluate the current, recommended radon action level of 4 pCi/L (picocuries per liter of air).



Final Report and
Recommendations
Due
First Interim Mtg 2022

